

**CLAIMS:**

1        1. A method for activating a volume group without a quorum of disks in said  
2        volume group being active comprising the steps of:

3              sending a first notification of updating data associated with a plurality of disks  
4        in a first volume group shared by a first node and a second node;

5              receiving a second notification by said second node indicating that said data  
6        associated with said plurality of disks in said first volume group has been updated,  
7        wherein said second notification comprises a data identifier; and

8              activating said first volume group by identifying a single disk with valid data  
9        out of said plurality of disks in said first volume group based on said data identifier.

1        2. The method as recited in claim 1, wherein said step of activating said first  
2        volume group shared by said first and said second node occurs after said first node  
3        becomes inoperative, wherein said first node becomes inoperative after sending said  
4        second notification.

1        3. The method as recited in claim 1, wherein said data is system configuration  
2        information.

1        4. The method as recited in claim 1, wherein said data identifier is a time stamp.

1        5. The method as recited in claim 1, wherein said data identifier is an indication  
2        of one or more of said plurality of disks in said first volume group that comprise valid  
3        data.

1        6. The method as recited in claim 1, wherein said data associated with said  
2        plurality of disks in said first volume group is updated if the allocation of said first  
3        volume group shared by said first and said second node needs to be changed.

1       7. A computer program product having computer readable memory having  
2 computer program logic recorded thereon for activating a volume group without a  
3 quorum of disks in said volume group being active, comprising:

4              programming operable for receiving a first notification of updating data  
5 associated with a plurality of disks in a first volume group shared by a first node and  
6 a second node;

7              programming operable for receiving a second notification indicating that said  
8 data associated with said plurality of disks in said first volume group has been  
9 updated, wherein said second notification comprises a data identifier; and

10             programming operable for activating said first volume group by identifying a  
11 single disk with valid data out of said plurality of disks in said first volume group  
12 based on said data identifier.

1       8. The computer program product as recited in claim 7, wherein said  
2 programming step of activating said first volume group shared by said first and said  
3 second node occurs after said first node becomes inoperative, wherein said first node  
4 becomes inoperative after sending said second notification.

1       9. The computer program product as recited in claim 7, wherein said data is  
2 system configuration information.

1       10. The computer program product as recited in claim 7, wherein said data  
2 identifier is a time stamp.

1       11. The computer program product as recited in claim 7, wherein said data  
2 identifier is an indication of one or more of said plurality of disks in said first volume  
3 group that comprise valid data.

1       12. The computer program product as recited in claim 7, wherein said data  
2       associated with said plurality of disks in said first volume group is updated if the  
3       allocation of said first volume group shared by said first and said second node needs  
4       to be changed.

1       13. A system, comprising:

2              a first node; and

3              a second node coupled to said first node, wherein said second node is  
4              configured to take over the functions of said first node if said first node becomes  
5              inoperative, wherein said second node comprises:

6                  a processor;

7                  a memory unit operable for storing a computer program operable for  
8              activating a volume group without a quorum of disks in said volume group being  
9              active;

10                 an input mechanism;

11                 an output mechanism; and

12                 a bus system coupling the processor to the memory unit, input  
13              mechanism, and output mechanism, wherein the computer program is operable for  
14              performing the following programming steps:

15                 receiving a first notification of updating data associated with a  
16              plurality of disks in a first volume group shared by said first node and said second  
17              node;

18                 receiving a second notification indicating that said data  
19              associated with said plurality of disks in said first volume group has been updated,  
20              wherein said second notification comprises a data identifier; and

21                 activating said first volume group by identifying a single disk  
22              with valid data out of said plurality of disks in said first volume group based on said  
23              data identifier.

1       14. The system as recited in claim 13, wherein said programming step of  
2              activating said first volume group shared by said first and said second node occurs  
3              after said first node becomes inoperative, wherein said first node becomes inoperative  
4              after sending said second notification.

1       15. The system as recited in claim 13, wherein said data is system configuration  
2 information.

1       16. The system as recited in claim 13, wherein said data identifier is a time  
2 stamp.

1       17. The system as recited in claim 13, wherein said data identifier is an indication  
2 of one or more of said plurality of disks in said first volume group that comprise valid  
3 data.

1       18. The system as recited in claim 13, wherein said data associated with said  
2 plurality of disks in said first volume group is updated if the allocation of said first  
3 volume group shared by said first and said second node needs to be changed.